

EDITORIAL

**LEARNING ENVIRONMENTS FOR UNDERGRADUATE
MEDICAL STUDENTS****Tehseen Iqbal**

RYK Medical and Dental College, Rahim Yar Khan, Pakistan

Learning Environment for Medical Students is defined as everything that happens within the classroom, department, university, Teaching Hospital, or outside, that is essential in determining the success of undergraduate medical students. Learning environment for undergraduate medical students has two major areas: Medical College, and Teaching Hospital. Each one of them has many components. Each component has its own learning style, dynamics and rules to follow. Each learning environment provides students an opportunity to interact with peers and teachers, to have frequent feedback, to apply their learning in other situations, and to experience diversity. Classroom/Lecture Hall, Laboratory, Museums, Tutorial Room, College Auditorium, College Library, Play Grounds, Patient Bedside, Outpatient Department, Operation Theatre, Demonstration Room, Community Health Centre, MCH Centre, Vaccination Centre, and even the Examination Hall are all parts of learning environment of an undergraduate medical student.

Keywords: Learning environment, Medical students, Teaching Hospital, Medical College

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Learning environment refers to the diverse physical locations, contexts, and cultures in which students learn. Learning environment for medical students is defined as everything that happens within the classroom, department, university or teaching hospital or outside the medical institution that is essential in determining the success of undergraduate medical students.^{1,2} The term also encompasses the culture of a school, its presiding ethos and characteristics, including how individuals interact with and treat one another, as well as the ways in which teachers may organize an educational setting to facilitate learning, e.g., by conducting classes in relevant natural ecosystems, grouping desks in specific ways, decorating the walls with learning materials, or utilizing audio, visual, and digital technologies.² An engaged learning environment increases students' attention and focus, promotes meaningful learning experiences, encourages higher levels of student performance, and motivates students to practice higher-level critical thinking skills.³

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Medical College:

In the medical college, there are many learning environments. The most well-known place in the medical college is Classroom or Lecture Hall which is meant for Large Group Teaching and Interactive Session. Rules to attend a classroom are very familiar to

all of us as we are attending classroom from our childhood. Second very important place for learning is Departmental Laboratory. In Physiology, Biochemistry, Histology, Pharmacology, Pathology and Histopathology there are specified laboratories where students learn to develop manual skills and learn to use different medical equipment. Without an overall, students are not allowed to enter the laboratory. Students are required to learn how to handle human secretions which are potentially infectious and hazardous. There are museums in Anatomy, Pharmacology, Community Medicine and Forensic Medicine Departments where different types of learning materials are present. In Anatomy museum, models of different body parts and bones are displayed for the learning of the students. In Pharmacology museum, different drugs, medicinal herbs and instruments for preparation and dispensing of drugs are exhibited for students. In Pathology museum, diseased organs and body parts are present to show students the gross pathology of different diseases. There are tutorial rooms in the college for Small Group Discussion.

Library is an essential part of a medical college. It is a rich source of learning materials for students. It contains books on different medical subjects and specialties, medical journals, digital books and journals. High standard medical colleges have access to Higher Education Commission (HEC) Digital Library which is an excellent resource to access thousands of books and journals online. Attending the Library requires obeying its decorum like maintaining silence and switching off the mobile tone. There is a College Auditorium for Seminars, Conferences, Clinico-pathological conferences (CPC), Debates and convocation. As 'healthy mind lives in a healthy body',

there are Play Grounds in the college for indoor and outdoor games. They are also the learning environments for medical students. Apart from the Physical Fitness and exercise, students learn teamwork and undergo behaviour training, i.e., showing graceful and courteous behaviour while they win and show tolerance and undertake self-accountability when they lose.

Teaching Hospital:

In the teaching hospital, there are different wards for different clinical specialties in which relevant patients are admitted for indoor hospital care. This is a special learning environment that has its own dynamics and rules. Patients are the learning resource for the students but students should learn basic medical ethics and counselling/history taking skills before dealing with the patients. Not only patients are there but also physicians and nurses are the stakeholders with whom the students should learn to behave and interact. 'Bedside' is the best learning place for medical students to learn History taking, Physical Examination, Differential Diagnoses, Medical Investigations, Definitive Diagnosis, and Patient Management and Treatment. There are Demonstration Rooms in each ward where clinical cases of that specialty are presented to the students and history taking, physical examination and diagnostic process are discussed with the students.

Out-Patient Department is another very important place in the teaching hospital where medical students learn different aspects of ambulatory care. Students take history, perform physical examination and prepare case for discussion with their medical teacher for learning.

Operation Theatre is a special learning environment for medical students. Here the students are required to wear masks, cover their heads with a cap and wear aseptic clothing or overall before entering the operation theatre. They are told not to touch any object in the theatre with their hands.

Address for Correspondence:

Dr Tehseen Iqbal, Head of Physiology Department and Vice Principal, RYK Medical and Dental College, Rahim Yar Khan, Pakistan. **Cell:** +92-333-6144799

Email: prof.tehseeniqbal@gmail.com

Vaccination Centre is also present in the teaching hospital. Students visit this centre to learn about the vaccination program being run in the country and they learn different aspects of Preventive Medicine.

Community Health Centre and MCH Centre are also the learning environments for medical students which are located away from their teaching institution. Medical students visit Community Health Centre (Basic Health Unit or Rural Health Centre) during their Community Medicine tour program to be familiar with the Health Delivery System practiced in the country. In Pakistan, Maternal Mortality Rate (MMR) and Under 5 Mortality Rate are still higher, and Mother and Child Health is top priority program. MCH Centre tour is a well focused component in Community Medicine.

Examinations are very important learning opportunities for the students. Examination hall has very different environment than the normal learning environments. In the examination hall, students learn Time Management when they allocate time for answering the questions. They also learn to use the precise writing skill when answering an extensive question in a short time. They also learn to use explanation skill in answering a question when answering material is short and the time is sufficient. During viva voce examination, students learn Communication Skill and to work under stress. During OSPE and OSCE students learn and practice patient dealing skills.

REFERENCES

1. Learning Environment Definition - The Glossary of Education Reform. Accessed at: <https://www.edglossary.org/learning-environment/> on 8 Nov 2021.
2. The quality of the educational environment in a medical college in Saudia Arabia. *Int J Med Educ* 2017;8:128-32.
3. The Importance of an Engaged Learning Environment. Accessed at: <https://www.theschoolinrosevalley.org/engaged-learning-environment/> on 6 Dec 2021.

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